

Title (en)

RECHARGEABLE ELECTROCHEMICAL CELL AND CELL CASE THEREFOR WITH VENT FOR USE IN INTERNAL RECOMBINATION OF HYDROGEN AND OXYGEN

Title (de)

WIEDERAUFLADBARE ELEKTROCHEMISCHE ZELLE UND ZELLGEHÄUSE MIT LUFTUNGSOFFNUNG UND INTERNEM REKOMBINATIONS-ELEMENT FÜR WASSERSTOFF UND SAUERSTOFF

Title (fr)

ELEMENT ELECTROCHIMIQUE RECHARGEABLE ET BOITIER D'ELEMENT APPROPRIÉ COMPRENANT UN ÉVÉNEMENT, DESTINÉS À UNE RECOMBINAISON INTERNE D'HYDROGÈNE ET D'OXYGÈNE

Publication

**EP 0819321 B1 19990707 (EN)**

Application

**EP 96912535 A 19960403**

Priority

- US 9604528 W 19960403
- US 41604395 A 19950404

Abstract (en)

[origin: US5506067A] A case for a rechargeable electrochemical cell comprises a vent disposed in the case interior, the vent including an oxygen/hydrogen recombination catalyst for catalyzing the recombination of the hydrogen produced by the cell during the recharge mode with oxygen in the case interior to form water in the case interior. The vent comprises a vent support extending inwardly from the cell case shell, a gas permeable, electrolyte impermeable vent cover membrane adjacent the interior surface of the vent support, and a porous catalyst support disposed in the case adjacent the interior surface of the vent cover membrane so that the vent cover membrane is sandwiched between the catalyst support and the vent support. Oxygen from the ambient air permeates the vent cover membrane and recombines with the hydrogen in the cell case interior. A rechargeable electrochemical cell comprising the cell case is encompassed and the cell is desirably a metal-air cell.

IPC 1-7

**H01M 12/06; H01M 10/42; H01M 2/12**

IPC 8 full level

**H01M 12/08** (2006.01); **H01M 2/12** (2006.01); **H01M 10/52** (2006.01)

CPC (source: EP US)

**H01M 10/52** (2013.01 - EP US); **H01M 50/30** (2021.01 - EP US); **H01M 50/394** (2021.01 - EP US); **Y02E 60/10** (2013.01 - EP)

Cited by

US6500576B1; US11047508B2; US11692644B2; US12078265B2

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**US 5506067 A 19960409**; AT E182032 T1 19990715; CA 2215932 A1 19961010; DE 69603170 D1 19990812; DE 69603170 T2 19991028; EP 0819321 A1 19980121; EP 0819321 B1 19990707; JP 2966105 B2 19991025; JP H10509554 A 19980914; WO 9631915 A1 19961010

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